

REMARKS

Claims 1-9 are pending in this application. By this Amendment, the title and claims 1-5 have been amended and claims 6-9 have been added. Claims 1, 4 and 5 are independent. Reconsideration of the application is respectfully requested.

I. Amendment

Support for the amendment to claims 1-5 and new claims 6-9 can be found in the specification at, for example, Fig. 4. Thus, no new matter is added.

II. Objection to the Specification

The Office Action objects to the title of the invention. The title of the invention has been amended to obviate the objection. Accordingly, withdrawal of the objection is respectfully requested.

III. Rejection Under 35 U.S.C. §101

The Office Action rejects claims 1-3 under 35 U.S.C. §101. Claim 1 has been amended to obviate the rejection.

The Office Action rejects claim 5 under 35 U.S.C. §101. Claim 5 has been amended to obviate the rejection.

Accordingly, withdrawal of the rejections of the claims is respectfully requested.

IV. The Claims Define Patentable Subject Matter

The Office Action rejects claims 1-5 under 35 U.S.C. §103(a) over U.S. Patent Publication No. 2003/0021492 to Matsuoka et al. (Matsuoka) in view of Japanese Patent Publication No. 2001-086332 to Hiroshi. This rejection is respectfully traversed.

Independent claim 1 recites, *inter alia*, "a whole image region containing image data after a projection transformation is partitioned into a plurality of regions by partitioning lines in a horizontal direction and a vertical direction in order to carry out a projection transformation in each of the regions" and "carrying out the partitioning so that the regions do

not contain a straight line passing through an origin in the horizontal direction and a straight line passing through the origin in the vertical direction." Independent claims 4 and 5 recite similar subject matter. The applied references fail to teach or render obvious the recited features of independent claims 1, 4 and 5.

The present application allows "the secure read-out of the pixel data that is the object of processing from the storage part 18," and "a sufficient amount of buffer (RAM 13) can be ensured compared to cases in which a single entire image is read out at one time, so that quick processing can be performed." See page 19, lines 1-9 of the specification. However, Matsuoka and Hiroshi do not disclose this functionality.

In particular, the correction amount generated only in the section (i.e. the square made by the points A4, E4, O4 and F4) partitioned by the X4-axis and the Y4-axis determine the correction amounts in the other sections. See Fig. 4(A) of the specification. This corresponds to "carrying out the partitioning so that the regions do not contain a straight line passing through an origin in the horizontal direction and a straight line passing through the origin in the vertical direction" as recited in claim 1 and similarly recited in claims 4 and 5.

As acknowledged by the Office Action, Matsuoka fails to disclose "a region setting step for setting first regions by partitioning an image obtained subsequent to transformation of the captured image by lines parallel to a horizontal axis and a vertical axis passing through an origin" and "the first regions are set by the processing of the region setting step so that the first regions do not contain the horizontal axis or vertical axis," as previously recited in claim 1. Thus, Matsuoka discloses the narrower recitations "a whole image region containing image data after a projection transformation is partitioned into a plurality of regions by partitioning lines in a horizontal direction and a vertical direction in order to carry out a projection transformation in each of the regions" and "carrying out the partitioning so that the regions do not contain a straight line passing through an origin in the horizontal direction and

a straight line passing through the origin in the vertical direction," as currently recited in claim 1, and similarly recited in claims 4 and 5.

Hiroshi fails to cure the deficiency of Matsuoka. Hiroshi fails to teach or render obvious the feature "a whole image region containing image data after a projection transformation is partitioned into a plurality of regions by partitioning lines in a horizontal direction and a vertical direction in order to carry out a projection transformation in each of the regions" and "carrying out the partitioning so that the regions do not contain a straight line passing through an origin in the horizontal direction and a straight line passing through the origin in the vertical direction," as recited in claim 1 and similarly recited in claims 4 and 5. In Hiroshi, an image is divided into halves. When an image is divided into an upper and a lower section, the Y-axis is included in each divided section. When an image is divided into a right and a left section, the X-axis is also included in each divided section. This division differs from the present application, which does not "contain a straight line passing through an origin in the horizontal direction and a straight line passing through the origin in the vertical direction," as recited in claim 1 and similarly recited in claims 4 and 5.

Thus, Matsuoka in view of Hiroshi fails to teach or render obvious a whole image region containing image data after a projection transformation is partitioned into a plurality of regions by partitioning lines in a horizontal direction and a vertical direction in order to carry out a projection transformation in each of the regions and carrying out the partitioning so that the regions do not contain a straight line passing through an origin in the horizontal direction and a straight line passing through the origin in the vertical direction.

The dependent claims are patentable at least due to their dependence on allowable independent claims 1, 4 and 5 and for the additional features that they recite.

Accordingly, withdrawal of the rejection of the claims is respectfully requested.

V. New Claims 6-9 are Patentable

New claims 6-9 are added. New claims 6-9 are patentable at least due to their dependence on allowable independent claims 4 and 5 and for the additional features that they recite.

VI. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-9 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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